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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/549,970 04/14/00 RAVKIN

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EXAMINER

FRASTHOFFER, T

ART UNIT

PAPER NUMBER

1627

DATE MAILED:

07/03/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/549,970

Applicant(s)

RAVKIN ET AL.

Examiner

Thomas W Prasthofer

Art Unit

1627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2001.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claims 1-25 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

DETAILED ACTION

Status of the Application

Receipt is acknowledged of an information disclosure statement and a power of attorney on March 12 and March 26, 2001.

Status of the Claims

Claims 1-25 are pending in the present application and are subject to restriction and election of species requirements.

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-8, 20, and 25, drawn to a chemical library composition, classified for example in class 435, subclass 7.1 or other classes and subclasses, depending on the compounds in the library.
 - II. Claims 16 and 17, drawn to an array device, classified for example in class 435, subclass 7.1 or other classes and subclasses, depending on the compounds attached to the carriers.
 - III. Claims 18 and 19, drawn to a kit, classified in various classes and subclasses, depending on the compositions of the carriers and classes of carriers.
 - IV. Claims 9 and 10, drawn to a method of forming a library of determinable chemical compounds, classified, in class 435 and various subclasses, depending on the compositions of the compounds.
 - V. Claims 11-15 and 21 drawn to a method of detecting one or more target molecules capable of binding to one or more different, known library compounds, classified in class 435, subclass 4.

- VI. Claims 22-24, drawn to a method of multiplexing the detection and quantification of analytes, classified in class 435, subclass 4.

The inventions are distinct, each from the other because:

2. Inventions I, II, and III are different and patentably distinct compositions because they comprise different chemical and structural elements. Invention III, for example, does not include compounds while Inventions I and II do. As another example, Invention I comprises detectable indicia at each code position while Invention II does not.
3. Inventions IV and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case Invention IV is a method of making a chemical library and Invention I is a chemical library. The library of Invention I can be made by other methods such as those comprising split synthesis, photomasking, and pin array synthesis, depending on the species of carriers, encoding, detectable indicia, and chemical compounds.
4. Inventions I and V are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the library composition of Invention I is used in the process (method) of Invention V. The library of Invention I, however, can also be used to screen for peptides that bind to a target without employing the codes on the carriers by sequencing the peptides directly, for example.

5. Inventions IV-VI are different and patentably distinct methods because they include different method steps, require different materials, reagents, and conditions, and/or provide different outcomes.
6. Inventions II-III (or I) and Inventions IV-VI (or VI) are different and patentably distinct inventions because the methods of Inventions IV-VI (or VI) do not require the use of the compositions of Inventions II and III (or I).
7. Because these inventions are distinct for the reasons given above and
 - a. have acquired a separate status in the art as shown by their different classification ;
 - b. have different and separately burdensome: manual and/or computer: structure, name and bibliographical searches; and
 - c. have divergent subject matter, restriction for examination purposes as indicated is proper.
8. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently filed petition under 37 CFR 1.48(b) and by the fee required under CFR 1.17(h).

Election of Species

10. This application contains claims directed to patentably distinct species of the claimed invention. If Applicant elects Invention I, applicant is required to elect one species from each of the following categories that are recited in the claims(six different species to be elected):

- A) species of coded carriers (e.g. microspheres),
- B) species of detectable indicia,

C) species of known chemical compounds (e.g. amino acids, peptides, nucleotides, nucleic acids, lipids, saccharides, or specified family of organic or inorganic compounds),

D) species of surface indicia,

E) species of known identifiable characteristics, AND

F) species of how (the manner in which) carriers are coded (e.g. color coded, bar coded, radio transmitter, etc).

11. If Applicant elects Invention II, applicant is required to elect one species from each of the following categories that are recited in the claims (four different species to be elected):

A) species of surface (e.g. glass slide)

B) species of coded carriers (e.g. microspheres),

C) species of how (the manner in which) carriers are coded (e.g. color coded, bar coded, radio transmitter, etc), AND

D) species of different chemical compounds (e.g. amino acids, peptides, nucleotides, nucleic acids, lipids, saccharides, or specified family of organic or inorganic compounds).

12. If Applicant elects Invention III, applicant is required to elect one species from each of the following categories that are recited in the claims (four different species to be elected):

A) species of coded carriers (e.g. microspheres),

B) species of class of coded carriers,

C) species of how (the manner in which) carriers are coded (e.g. color coded, bar coded, radio transmitter, etc), AND

D) species of how (the manner in which) carriers are capable of having a compound attached.

13. If Applicant elects Invention IV, applicant is required to elect one species from each of the following categories that are recited in the claims (five different species to be elected):

- A) species of determinable chemical compounds (e.g. amino acids, peptides, nucleotides, nucleic acids, lipids, saccharides, or specified family of organic or inorganic compounds),
- B) species of carriers (e.g. microspheres),
- C) species of detectable code combinations,
- D) species of detectable indicia,
- E) species of oligomer synthesis reaction (e.g. peptide, nucleic acid, other specified polymer)

14. If Applicant elects Invention V, applicant is required to elect one species from each of the following categories that are recited in the claims (eight different species to be elected):

- A) species of target molecule (e.g. oligopeptide, oligonucleotide, etc.),
- B) species of coded carriers (e.g. microspheres),
- C) species of detectable indicia,
- D) species of (means of) detecting carriers having bound target molecules,
- E) species of (means of) decoding carriers having bound target molecules,
- F) species of analyte,
- G) species of (library) compounds (e.g. amino acids, peptides, nucleotides, nucleic acids, lipids, saccharides, or specified family of organic or inorganic compounds), AND
- H) species of (means of) splitting analyte.

15. If Applicant elects Invention VI, applicant is required to elect one species from each of the following categories that are recited in the claims (six different species to be elected):

- A) species of probes (claim 22),
- B) species of designated distinguishable carriers,
- C) species of analytes,
- D) species of signal measured,
- E) species of surface, AND
- F) species of features inherent to the carriers and the position of the carriers.

16. The species are distinct, each from the other, because they have different chemical compositions and/or structures, different chemical, physical, and biological properties, and/or require different method steps, conditions, and reagents to use and make. Therefore, different issues of enablement and patentability apply to each species and each species represents patentably distinct subject matter.

17. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is properly generic.

18. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, ***and a listing of all claims readable thereon, including any claims subsequently added.*** An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

19. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. ***If claims are added after the election, applicant must indicate which are readable upon the elected species.*** MPEP § 809.02(a).

20. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Thomas Prasthofer** at telephone number **(703) 308-4548**. The examiner can normally be reached on Monday, Tuesday, Friday, and Saturday 8:00-6:30.

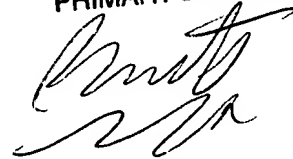
22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jyothsna Venkat can be reached on (703) 308-2439. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-2742.

23. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist at (703) 308-1235.

Thomas Prasthofer, Ph.D.

July 1, 2001

BENNETT CELSA
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Bennett Celsa', written over the printed name and title.